



Docket: SJO920000194US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Chen et al.
SERIAL NO.: 10/053,785 GROUP ART UNIT: 1775
FILED: 01/18/02 EXAMINER: Robert R. Koehler
FOR: Method For Electroplating A Body-Centered Cubic
 Nickel-Iron Alloy Thin Film With A High Saturation Flux
 Density

Commissioner for Patents
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Dear Sir:

In response to the Notice of Allowance dated December 15, 2003, please amend the above identified application as follows.

In the Specification:

Please replace the paragraph beginning at page 8, line 4, with the following rewritten paragraph:

The method of this invention forms electroplated layers 38 and 42 so that the alloy has a small domain size and therefore a relatively low anisotropic field (H_K) with a very high saturation flux density (B_S) of from about 1.9 to about 2.3 T (19 to 23 kG). Seed layers 36 and 40 are preferably formed of an alloy having an equal or higher saturation flux density (B_S) value. For example, seed layers 36 and 40 may be formed of a sputtered nickel-iron alloy with 64% to 81% iron by weight. Or, as other examples, seed layers 36 and 40 may be formed of a sputtered iron-nitride-X ($FeNX$) alloy, or a cobalt-iron-X ($CoFeX$) alloy with X